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**DTE Energy®**



**DTE Utility-owned SolarCurrents  
Pilot Program - Update**

**August 22, 2012**

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# ***PA 295 of 2008 has led Detroit Edison to develop the following RPS Portfolio Plan***



As approved by the MPSC in 2009

RPS investments under Detroit Edison's renewable energy plan projected at \$2 B over 20-year plan

## **Detroit Edison-Owned**

- 565 MW of wind assets (if 2 MW each, yields ~280 turbines)
- ***15 MW of Detroit Edison-owned solar pilot program***
- Equivalent of 29 MW of co-firing renewable fuels in existing generating facilities (e.g., displaces non-renewable fuels)

## **Contracted (PPA & REC purchases)**

- 586 MW of purchases from third parties over the 20 year program. Majority will be sourced from wind turbines, approximately the same scale and number as the Detroit Edison-owned wind turbines
- ***5 MW Customer-owned solar pilot program. (Program Fully Subscribed)***

# DTE Energy-owned Solar Pilot Program



- 15 MW in total nameplate capacity
- \$112 Million budget over 5 years
- Sited on large rooftops, ground-mounted or on DTE Energy facilities
- Using standard site easement agreements
- Purpose of pilot program is to gain knowledge and experience
  - Multiple technologies
  - Comparison of tracking versus fixed installation schemes
  - Physical and process integration with distribution system operations

# ***Detroit Edison-Owned Solar Pilot Program***



## **The Project Development Process:**

- **Step 1:** Identify Customer/Project – Present program parameters and conduct Site Opinion.
- **Step 2:** Negotiate a site easement agreement with customer. Conduct Site Feasibility Assessment (4-6 Months)
- **Step 3:** Engineer, Procure and Construct (EPC) project - (7-9 Months)

## **Planned Build Schedule**

Detroit Edison Utility-Owned Solar Pilot Program Plan						
Year	2010	2011	2012	2013	2014	2015
kW built by year in RE Plan	60	2,536	2,551	3,875	4,300	1,678
Cumulative kW Built	60	2,596	5,147	9,022	13,322	15,000

# Project Summary



	<u>Site</u>	<u>Size (kW)</u>	<u>COD</u>	<u>Status</u>
1	DECo Project #1 (Scio Township)	60	11/16/2010	Complete
2	Ford Michigan Assembly (Wayne)	502	1/25/2011	Complete
3	Monroe County Community College	513	2/22/2011	Complete
4	Blue Cross Blue Shield (Detroit)	220	8/5/2011	Complete
5	GM Chevy Volt Plant (Hamtramck)	516	9/30/2011	Complete
6	DECo project #2- TDC (Westland)	391	9/16/2011	Complete
7	Mercy High School (Farmington Hills)	394	12/28/2012	Complete
9	Warren Consolidated Schools CPC (Sterling Heights)	197	3/22/2012	Complete
8	DECo Project #3 -HQ (Detroit)	80	Est. 8/2012	Construction
10	GM Orion Assembly (Orion Township)	350	Est. 8/2012	Construction
11	Huron Clinton Metro Parks (White Lake)	495	Est. 9/2012	Construction
12	IHM The Mother House (Monroe)	516	Est. 11/2012	Design
13	Wil-Le Farms (Bad Axe)	486	Est. 10/2012	Construction
14	U of M - North Campus Research Complex (NCRC)	425	Est. 12/2012	Design
15	U of M - Information, Science and Technology (IST)	230	Est. 3/2013	Design
<b>Total kW</b>		<b>5375</b>		

# ***Detroit Edison standard Solar Power Easement Agreement***



## **Basic Terms and Conditions**

- 20 year agreement.
- Remain full-service bundled electric customer for the 20 year term.
- Up-front Construction Payment and an Annual Easement Payments.
- Removal/Relocation cost for early termination.
- DTE owns the Electric Energy and the Renewable Energy Credits (RECs) generated from project.
- Educational Kiosk provided to customer



# ***Educational Kiosk will be provided.***

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## Prototype Features

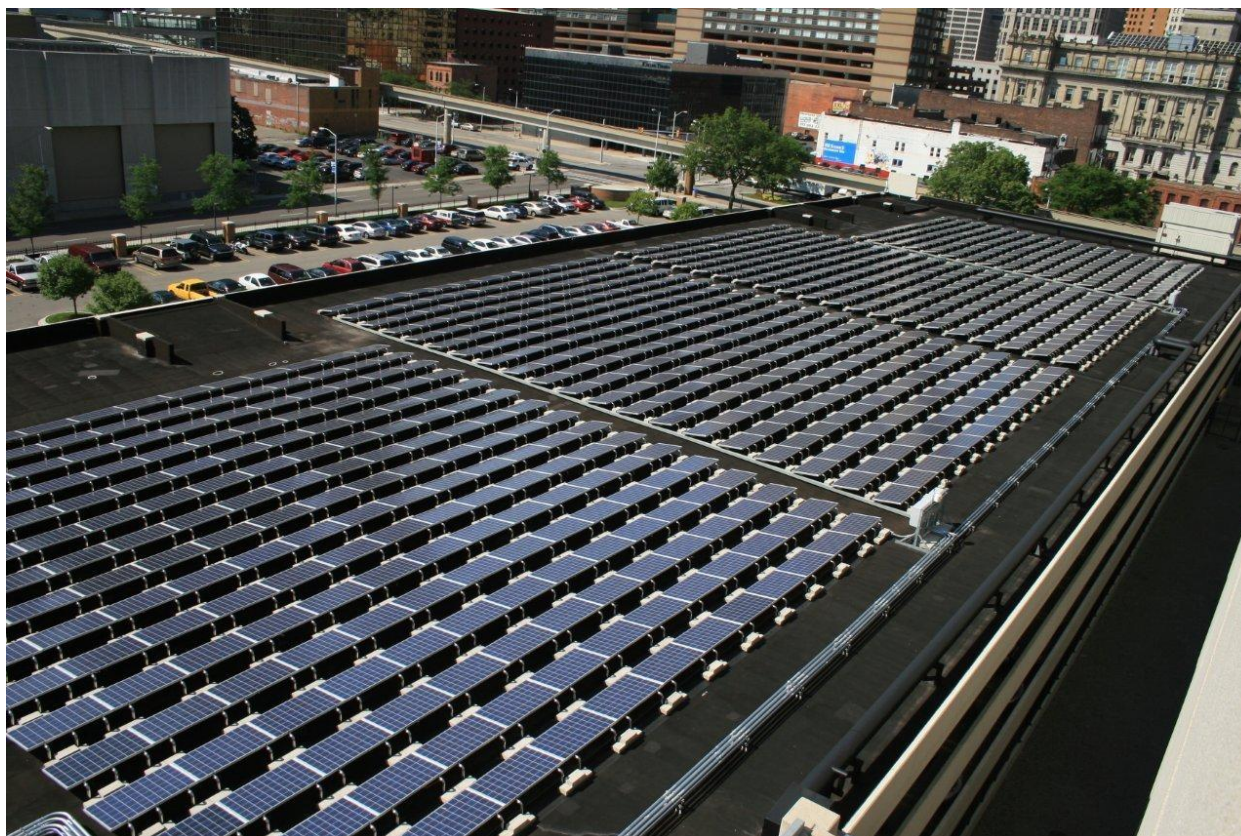
- 32" Monitor with video on solar basics.
- 19" Monitor with web based monitoring of the project.
- Solar panel sample.
- Solar messaging.

## Production Enhancements

- Audio with volume control.
- Keyboard and trackball



## ***EXAMPLE - BCBS Solar PV Project***



- Array size 220kW
- 31,602 Sq./Ft.
- ~975 PV modules
- One of the largest roof top installations in Michigan
- Interconnect to BCBS system
- Utilize 100% Michigan Labor





# Questions?